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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,264	02/25/2004	Robert A. Boger	P1415US02	2426
32709 Gateway Inc	7590 07/27/200	7 .	EXAM	INER
Patent Attorney PO Box 2000			CHOW, JEFFREY J	
N. Sioux City,	SD 57049		ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

· · · · · · · · · · · · · · · · · · ·	Application No.	A matter matter				
	Application No.	Applicant(s)				
	10/786,264	BOGER, ROBERT A.				
Office Action Summary	Examiner	Art Unit				
	Jeffrey J. Chow	2628				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with	the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA 36(a). In no event, however, may a repl will apply and will expire SIX (6) MONTH e, cause the application to become ABAN	ATION. ly be timely filed IS from the mailing date of this communication. NDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 25 N	<u>lay 2007</u> .	•				
2a) ☐ This action is FINAL . 2b) ☑ This	This action is FINAL . 2b)⊠ This action is non-final.					
· · · · · · · · · · · · · · · · · · ·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under t	Ex parte Quayle, 1935 C.D.	11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) <u>1-31,33-37,39,41,43 and 45</u> is/are pe						
5) Claim(s) is/are allowed.						
6) Claim(s) <u>1-31,33-37,39,41,43 and 45</u> is/are re	jected.					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	ar					
10) The drawing(s) filed on is/are: a) acc		the Examiner.				
Applicant may not request that any objection to the	, , ,					
Replacement drawing sheet(s) including the correct	tion is required if the drawing(s)) is objected to. See 37 CFR 1.121(d).				
11) ☐ The oath or declaration is objected to by the E	xaminer. Note the attached (Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	n priority under 35 U.S.C. § 1	19(a)-(d) or (f).				
1. Certified copies of the priority document	ts have been received					
2. Certified copies of the priority document		olication No				
3. Copies of the certified copies of the prior	• •					
application from the International Burea	•	ŭ				
* See the attached detailed Office action for a list	of the certified copies not re	eceived.				
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Attachment(s)	_					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		mmary (PTO-413) Mail Date				
Notice of Draitsperson's Patent Drawing Review (P10-946) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date		ormal Patent Application (PTO-152)				

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1 - 37, 39, 41, 43, and 45 have been considered but are most in view of the new ground(s) of rejection.

The 35 U.S.C 112 rejections have been withdrawn due to applicant's amendments and arguments.

Claim Objections

Claim 18 is objected to because claim 18 recites, "a video controller" where they have antecedent bases from claim 13.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10, 13-25, 27, 29, 30, 32, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frederick et al. (US 6,314,479) in view of Roskowski et al. (US 5,257, 348) and Ersoz et al. (US 5,287,189).

Regarding independent claim 13, Frederick teaches a computer system (Figure 6: Host Computer 16) comprising a host computer system including a processor (it is inherent that

Frederick has a processor because computer has a processor and because Frederick process information in and out of the computer), a memory coupled to said processor (it is inherent that Frederick has a memory because computer has a memory, either being hard drive, RAM, and/or, cache and because a processor needs memory to store input and output-type data to be able to process data), a video controller coupled to said processor and said memory (column 5, lines 33 - 35: it is inherent that Frederick has a display controller as the PC 14 and display 12 support two different viewing modes where one mode is configured for displaying PC graphics and the other mode is configured for displaying TV video), and a display apparatus coupled to a video controller of the host computer system (Figure 6: A/V display 12), the display apparatus comprising circuitry allowing an interlaced mode of operation (column 5, lines 3-5: the display 12 may function as a stand-alone TV, including the capability to display standard interlaced TV video) and a noninterlaced mode of operation (column 5, lines 36 and 37: the PC 14 and display 12 support at least 480 active lines per frame of progressively scanned video), the display apparatus comprising a screen (it is inherent that Frederick has a screen because it is inherent that a display apparatus has a screen), said screen operable to display visually detectable output from the host computer system (Figure 6: Digital Graphic Display 46 and Analog Graphic Display 48 from the Host Computer 14) when operating in the noninterlaced mode of operation (column 21, lines: 25 - 56) and operable to display a television compatible signal when operating in the interlaced mode of operation (Figure 6: Digital Graphic Display 46 and Analog Graphic Display 48 from the Host Computer 14), a communication channel between said host computer system and said display apparatus (Figure 6: User Input USB (42) from the A/V Display 12 to Host Computer 14 and Commands (USB) 44 from Host Computer 14 to A/V Display 12;), the

communication channel for transmitting commands and information to and from said host computer system and to and from said display apparatus (Figure 6: 42 and 44), a microprocessor configured to receive said commands from said host computer system (column 5, lines 46 – 49: the PC 14 and display 12 support the USB monitor Control Class Specification and VESA Monitor Control Command Set (MCCS) Standard for software control of the display by the PC) when the display apparatus is in the interlaced mode of operation and when the display apparatus is in the noninterlaced mode of operation (column 5, lines 31 and 32: the PC 14 drives the display 12 with a standard RGB or TMDS video signal), said microprocessor (column 16, lines 43 – 55 and Figure 8: the control electronics 82 represents the display microcontroller communication and control functionality) comprising control logic for switching said display apparatus between said interlaced and noninterlaced modes of operation in response to at least one of said commands (column 5, lines 31 and 32: the PC 14 drives the display 12 with a standard RGB or TMDS video signal; column 13, lines 4-28: Table 9). Frederick did not expressly disclose a video capture circuitry configured for use in the noninterlaced mode to convert the television compatible signal into a noninterlaced television output to be displayed in an overlay window while said visually detectable output from the host computer system is being displayed. Roskowski discloses an A/D converter 15 (column 4, line 60 – column 5, line 11 and Figure 2) and a circuit 19 that translates interlaced video data into non-interlaced data and noninterlaced computer graphics data into interlaced data for presentation on output display monitors capable for displaying either interlaced data or non-interlaced data (column 6, lines 9 – 16 and Figure 2) and the viewing of television and computer graphics at the same time by allowing the display of television in one window and the display of computer graphics in another window

overlaid and displayed at the same time in the same frame buffer (column 1, lines 11 – 16 and lines 18 – 30). Ersoz discloses a 4x3 video being overlaid on top of a 16x9 video (Figure 1c). It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Frederick's system by converting an interlaced signal to a non-interlaced signal or a non-interlaced signal to an interlaced signal and outputting the converted interlaced signal with a non-interlaced signal or the converted non-interlaced signal with an interlaced signal on an overlay window of a non-interlaced display or an interlaced display, respectively through out. One would be motivated to do so because this would allow less expensive monitors and allow users to view multiple sources at the same time.

Regarding independent claim 1, claim 1 is similar in scope as to claim 13, thus the rejection for claim 13 hereinabove is applicable to claim 1.

Regarding dependent claim 2, Frederick teaches interlaced mode of operation supports at least one of a National Television System Committee (NTSC) input, a Phase Alteration by Line (PAL) input, and a Sequential a Memoire (SECAM) input (column 15, line 57 – column 16, line 11).

Regarding dependent claim 3, Frederick teaches noninterlaced mode of operation supports at least one of a computer graphics mode input, VGA input and SVGA input (column 19, lines 23 – 32: displays VGA video from the PC 14).

Regarding dependent claim 4, Frederick teaches the microprocessor receives at least one command from said host computer system, the command suitable for controlling a television function of the display apparatus from the host computer system (column 13, line 66 – column 14, line 26: the user controls the ability to receive commands specified in Table 10 and that the

controls listed in Table 10 is supported by the PC 14), wherein the television function includes at least one of changing a channel, volume adjustment and picture adjustment (column 14, lines 10 – 27: Table 10).

Regarding dependent claim 5, Frederick teaches the television function includes at least one of selecting a video source, brightness, contrast, vertical and horizontal sizing and positioning, on/off (rest/resume), refresh rate, resolution and color temperatures (column 12, lines 1 - 18: Table 7; column 12, lines 30 - 65: Table 8).

Regarding dependent claim 6, Frederick teaches the television function of the display apparatus is controlled from the host computer system while the display apparatus is in an interlaced mode of operation (column 13, line 66 – column 14, line 26: the user controls the ability to receive commands specified in Table 10 and that the controls listed in Table 10 is supported by the PC 14; column 5, lines 3 – 5: the display 12 may function as a stand-alone TV, including the capability to display standard interlaced TV video).

Regarding dependent claim 7, Frederick teaches the display apparatus is switched to said interlaced mode of operation, a video signal from a video controller in noninterlaced mode is not displayed by said display apparatus (column 5, lines 3 - 5: the display 12 may function as a stand-alone TV, including the capability to display standard interlaced TV video).

Regarding dependent claim 8, Frederick teaches the interlaced mode of operation supports Sequential a Memoire (SECAM) input (column 15, line 57 – column 16, line 11).

Regarding dependent claim 9, Frederick teaches the command is a display mode change command (column 12, lines 30 – 64: Table 8; column 13, lines 3 – 28: Table 9: TV Mode, Stand Alone Mode).

Regarding dependent claim 10, Frederick teaches the command is sent over a serial port (column 10, lines 6 - 23: USB).

Regarding dependent claims 15 and 16 and independent claim 29 and 34, claims 15, 16, 29 and 34 are similar in scope as to claims 4 and 5, thus the rejections for claims 4 and 5 hereinabove are applicable to claims 15, 16, 29, and 34.

Regarding dependent claims 14, 17, 18, 23, 24, 25, 28, 30, 32, 33, 35, 36, and 37, claims 14, 17, 18, 23, 24, 25, 30, 32, 35, and 36 are similar in scope as to claims 2, 3, 6, 7, 9, 10, and 12, thus the rejections for claims 2, 3, 6, 7, 9, 10, and 12 hereinabove is applicable to claims 14, 17, 18, 23, 24, 25, 28, 30, 32, 33, 35, 36, and 37.

Regarding dependent claim 19, Frederick teaches the video controller receives a signal from the display apparatus (Figure 6: Baseband video input (Composite) 52 from the A/V Display 12 to Host Computer 14).

Regarding dependent claim 20, Frederick teaches the signal from the display apparatus is a video signal (Figure 6: Baseband video input (Composite) 52 from the A/V Display 12 to Host Computer 14).

Regarding dependent claim 21, Frederick teaches the video signal is a composite signal (Figure 6: Baseband video input (Composite) 52 from the A/V Display 12 to Host Computer 14).

Regarding dependent claim 22, Frederick teaches the video signal is an S-video signal (column 6, line 57 – column 7, line 15: Table 1: A S-video connector may be substituted if an adapter for composite video support is supplied with the product).

Regarding dependent claims 27, Frederick teaches disclose the command is sent over a data port (column 9, line 66 – column 5: DDC2B support is used in both the PC 14 and display 12; column 10, lines 6 – 23: USB is a bidirectional serial bus).

Claims 11 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frederick et al. (US 6,314,479) in view of Roskowski et al. (US 5,257, 348) and Newman et al (US 6,154,600).

Regarding dependent claims 11 and 26, Frederick did not expressly disclose the command is sent over a parallel port. Newman discloses a parallel port (column 7, lines 1 – 24). It would have been obvious to one of ordinary skill in the art at the time of applicants invention to modify Frederick's system to send a display mode command from the display apparatus parallel busses to the display apparatus so display mode commands which are digital, need not be derived from the horizontal and vertical sync signals, which are analog, thus simplifying the transmission and reception of the display mode commands.

Claims 12, 28, 33, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frederick et al. (US 6,314,479) in view of Roskowski et al. (US 5,257, 348) and Ersoz et al. (US 5,287,189).

Regarding dependent claim 12, 28, 33, and 37, Frederick did not expressly disclose the overlay widow is enabled as at least one of a picture-in-picture (PIP) and a picture-on-picture (POP). Ersoz discloses PIP (Figure 1(f)), which reads on the claimed overlay window is enabled as at least one of a picture-in-picture (PIP) and a picture-on-picture (POP). It would

have been obvious for one of ordinary skill in the art at the time of the invention to modify Frederick's system to include PIP and POP. One would be motivated to do so because this provides picture-in-picture options and the viewing of multiple desired data.

Claims 39, 41, 43, and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frederick et al. (US 6,314,479) in view of Roskowski et al. (US 5,257, 348) and Ersoz et al. (US 5,287,189) and Gough et al. (US 6,072,489).

Regarding dependent claims 39, 41, 43, and 45, Frederick did not expressly disclose the computer system permits the utilization of other computer functions on at least one underlying screen of the overlay window. Gough discloses overlay windows 62 and 70 over a screen 60 in where other computer functions are allowable, such as the desktop (Figures 3a and 3b). It would have been obvious for one of ordinary skill in the art at the time of the invention to modify Frederick's system to allow computer functions to operate with an overlay window present. One would be motivated to do so because this allow users to multi-task and allow users to utilize the whole screen.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey J. Chow whose telephone number is (571)-272-8078. The examiner can normally be reached on Monday - Friday 10:00AM - 5:00PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on (571)-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJC

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